

CITY OF HAYWARD

AGENDA REPORT

AGENDA DATE 04/20/99

AGENDA ITEM _____

WORK SESSION ITEM WS#3

TO: Mayor and City Council

FROM: Chief of Police

SUBJECT: Overview of Photo Red Light

RECOMMENDATION:

It is recommended that the City Council review and comment on this report.

BACKGROUND/DISCUSSION:

The Hayward Police Department was asked to study the feasibility of using Photo Red Light Enforcement by the City Council. This report will provide basic background information about Photo Red Light, the pros and cons of the system and the steps that would be required to implement the system in the City of Hayward.

What is Photo Red Light Enforcement?

Photo Red Light is a camera system that photographs vehicles that have crossed into an intersection after a signal light has turned red. The photographic equipment works in concert with loops in the roadway. The system is designed to capture a photograph of the violator's front license plate, as well as a photograph of the driver. The violator is subsequently issued a traffic citation for running the red light.

How does it work?

Photo Red Light cameras are placed at strategic intersections in the City. The vendor periodically retrieves the film from the cameras and develops the photographs. The vendor reviews the photographs and screens them to determine legibility of the violator's license plate. Legible license plates are used by the vendor to obtain identifying information about the registered owner of the vehicle from the Department of Motor Vehicle. A driver's license photograph of the registered owner is then compared with the photograph captured by the Photo Red Light camera to determine if the registered owner and the violator are one and the same person. If a positive match is made on the photograph, the vendor electronically generates a citation. A Hayward Police Officer would then review both the photographs of the violator and the drivers license to confirm the preliminary findings of the Photo Red Light

vendor. If the officer can verify that the photograph generated by the red light camera and the DMV drivers license photograph are the same, the reviewing officer electronically signs the citation. The citation, along with a copy of the photograph, is then sent to the offender by the vendor.

Does it reduce red light violations and accidents?

Photo Red Light has proven to be an effective tool in reducing traffic accidents associated with red light violations. Cities currently using Photo Red Light enforcement have reported significant reductions in accident rates, as well as a reduction in the number of red light violations at targeted intersections.

Review of accidents in the City of Hayward:

In the City of Hayward there are four types of violations, which have been determined to be the primary cause of accidents. In 1998 approximately 2,500 accidents were reported in the city of Hayward. The following is a breakdown of the violations that were determined to be the cause of these accidents.

1. Speeding Violations	596	(24%)
2. Turning Violations	394	(16%)
3. Yield Violations	270	(11%)
4. Red Light and Stop Sign Violations	143	(6%)
5. Other Violations	1,097	(43%)

Using the most current State Wide Integrated Traffic Accident Reporting System (SWITRS) accident information it was found that the intersection of Calaroga Ave. and W. Tennyson Rd. has the highest accident rate involving red light violations. In 1997 a total of five accidents at this intersection were caused by red light violations. Statistics indicate that eight other intersections in Hayward had three accidents each, which were caused by red light violations. Specific accident location information for 1998 is not currently available from S.W.I.T.R.S.

On March 26 a survey of Red Light violations was conducted at the intersection of Calaroga Ave. and Tennyson Rd. During an eight-hour period from 8 AM to 4 PM, there were a total of 19 red light violations noted. During the same time period 30 visual speed violations were observed.

How many violators receive Photo Red Light citations?

Statewide approximately only 34% of the Photo Red Light violators receive citations. This percentage is relatively low because either the photograph of the violator is unidentifiable, the person in the photograph is not the registered owner of the vehicle, there is no front license plate on the vehicle, or the license plate is not legible in the photograph. In order to obtain a conviction it is absolutely necessary to positively identify the driver of the vehicle.

What does it cost?

Currently Lockheed Martin Corporation is the only company offering the City of Hayward a Photo Red Light system. Lockheed Martin offers a three year turnkey program. The annual lease fee per camera is \$3,500 per month, with a minimum requirement of 3 cameras. The total rental fee for the first year would be approximately \$129,600. During the second and third year of the contract there is no monthly rental fee on the cameras. Lockheed Martin would receive 80% of the fines paid for the first 1,250 citations issued and 70% of the fines paid for the next 1,250 citations issued. The city receives \$151.00 per red light violation, therefore Lockheed Martin would receive approximately \$120.00 of each fine paid and the City would receive approximately \$30.00.

Lockheed Martin also has a program that would allow us to purchase the camera equipment, thus eliminating the monthly rental fee. The purchase program would cost \$53,000.00 per camera, as well as a \$25,000.00 installation fee for each camera. The total cost to purchase and install cameras and equipment with this option would be approximately \$234,000.00. Under this purchase program \$98.00 of every citation paid would go to the vendor for processing of photographs and maintenance of the equipment.

A Police Officer would be required to review and electronically sign each citation before it could be issued. It is estimated that one officer would spend about 30 hours a week during the startup period of this program. Later this would probably be reduced to 20 hours a week, unless more cameras were installed increasing the number of citations issued.

What do other Cities think?

A number of cities were contacted who are currently using the Photo Red Light system. We spoke with San Francisco and Santa Rosa in depth because they are both currently using the Lockheed Martin system. Representatives from both of these cities agree that the system has reduced the number of accidents associated with red light violations in their cities. They also agree, unquestionably, that fewer people run red lights in their city with this system in place. Santa Rosa, who currently has cameras at three intersections, indicated that during a one-year period a total of 628 citations were issued as a result of Photo Red Light enforcement. The opinion of those currently using this system is that if you have a problem with accidents associated with red light violations, this system is outstanding. They stated the system is not a revenue generator and that it will not pay for itself. Significant costs are incurred, especially during the first year, as a result of the monthly rental fee for the cameras (\$3,500.00 per camera each month) and required staff involvement. The true benefit with this system is that it will effectively reduce accidents related to red light violations.

Legal Issues:

The Hayward Traffic Court has expressed some concern with the possibility of using Photo Red light in the City of Hayward. The Traffic Commissioner bases his concern upon the issue of due process. The Traffic Commissioner feels that the system penalizes law abiding citizens

and fails to address those who choose to operate their vehicles either unregistered or without front license plates.

The question arises as to what action could be taken if the person receiving a Photo Red Light citation in the mail simply chooses to ignore it. Photo Red Light citations complicate the legal response to this, because the violator never signs a promise to appear, as they would if an officer were to issue the citation in person. The courts can take action when this occurs, however, the process can become very complicated and civil issues may arise. The traffic courts would probably not support the process because of the resources, time commitment and due process issues that would arise. Most cities using Photo Red Light have chosen to take no follow up action when a violator fails to respond to a Photo Red Light citation. In essence, compliance with the citation becomes voluntary and the legal mandates to pay fines are basically more of a facade.

What steps would be required to implement Photo Red light in Hayward?

1. The City Council would be required to hold a public hearing and adopt a resolution supporting Photo Red Light.
2. A contract would be negotiated with a vendor. (Upon approval of a contract the system could be in place in as little as 90 days)
3. The vendor would provide training for the Courts, City of Hayward and Police Department.
4. Construction meetings would be held including Public Works, to coordinate installation.
5. The vendor would assist with community awareness program. (Includes information manuals)
6. The vendor would provide web site access for photograph review and electronic signature.
7. The California Vehicle Code requires that only warnings be issued during the first 30 days of the Photo Red Light program.

CONCLUSION:

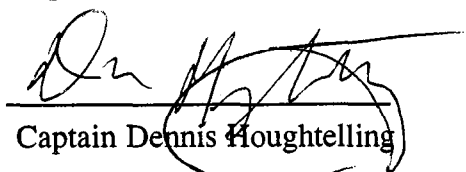
The Photo Red Light system is an innovative approach to traffic enforcement that has proven to be an effective tool in reducing traffic accidents. The key to being successful with this system is that it should be used to address a significant red light problem. The system is not a revenue generator, so if we choose to use this system, we should be prepared to absorb a significant portion of the associated costs. The following is a comparison of the figures to either rent or purchase the Photo Red Light System.

<i>Photo Red Light Rental</i>				
	Year 1	Year 2	Year 3	Year 4
Revenue*				
(City receives 20% of \$151 fine)	\$30,000	\$30,000	\$30,000	\$30,000
	\$30,000	\$30,000	\$30,000	\$30,000
Expenditure				
Rental of equipment	\$129,600	\$0	\$0	\$0
Officer-30 hours	\$60,000	\$0	\$0	\$0
Officer-20 hours **	\$0	\$40,000	\$40,000	\$40,000
	\$189,600	\$40,000	\$40,000	\$40,000
TOTAL COST TO THE CITY	(\$159,600)	(\$10,000)	(\$10,000)	(\$10,000)
<i>*Based on issuance of 1,000 citations.</i>				
<i>** The number of hours required for the second and subsequent year of the program would be less.</i>				

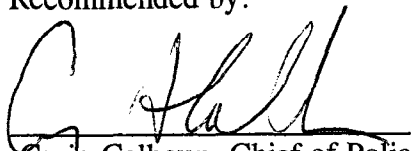
<i>Photo Red Light Purchase</i>				
	Year 1	Year 2	Year 3	Year 4
Revenue*				
(City receives 30% of \$151 fine)	\$53,000	\$53,000	\$53,000	\$53,000
	\$53,000	\$53,000	\$53,000	\$53,000
Expenditure				
Purchase of equipment	\$234,000	\$0	\$0	\$0
Officer-30 hours	\$60,000	\$0	\$0	\$0
Officer-20 hours**	\$0	\$40,000	\$40,000	\$40,000
	\$294,00	\$40,000	\$40,000	\$40,000
TOTAL COST TO THE CITY	(\$241,000)	\$13,000	\$13,000	\$13,000
<i>*Based on issuance of 1,000 citations.</i>				
<i>** The number of hours required for the second and subsequent year of the program would be less.</i>				

Since only approximately 6% of accidents in Hayward are associated with red light violations, the City might consider alternatives to this system. In a spot survey of red light violations at a high accident location, Tennyson Rd. and Calaroga Ave., 19 red light violations were noted in an 8-hour period. Under the current system the City would receive \$151.00 for a paid red light citation issued by an officer. As a part of the budget process the Police Department will be evaluating the effectiveness of employing an additional traffic officer.

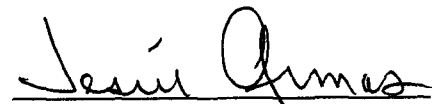
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